JVC Instruction Book

DIRECT DRIVE AUTO-RETURN TURNTABLE

JL-A40

For Customer Use:

Enter below the Model No. and Serial No. which is located either on the rear or bottom of the cabinet. Retain this information for future reference.

Model No. _____

Serial No. _____

E30580-616A

A GUIDE TO THIS INSTRUCTION BOOK

Thank you for buying JVC's JL-A40 Auto-return Direct-Drive turntable. You are now the owner of a sophisticated turntable with a sturdy, precision built, automatic mechanism driven by a direct-drive phono motor. The many advanced features of this turntable can be fully and efficiently utilized only when you read this instruction book, understand it and operate the turntable correctly. Before setting-up, be sure to read the important precautions contained in this manual. Wishing you happy and successful listening.

CONTENTS

A guide to this instruction book 1
Precautions 1
Important 2
Preparation 2
Connection to a stereo amplifier 4
Cartridge mounting 4
Operation (How to use) 5
Stylus replacement 6
Troubleshooting 6
Specifications 6

PRECAUTIONS

Installation

* Select a place which is level, dry and neither too hot nor too cold (between -5° and 40°C/23°F and 104°F).
  - Keep the turntable from direct sunlight.
  - Do not put it too close to a heater.
* To decrease noise
  - Keep it as far from your TV as possible.
  - Do not place it where it is dusty.
  - Do not place the turntable just on top of an amplifier as hum noises may be induced from the power transformer.
* To prevent stylus tripping
  - Do not place it in a place subject to vibrations.
  - Place the turntable as far away from speakers to prevent howling as possible.

Power

* Do not handle the power cord with wet hands!
* Do not bend the power cord sharply.
* When unplugging from the wall outlet, always pull the plug, not the power cord.

Malfunctions, etc.

* There are no user serviceable parts inside. If anything goes wrong, unplug the power cord and consult your dealer.
* Do not insert any metallic object inside the turntable.
* Do not allow water to get inside the turntable.
* Tracking force will affect the reproduced sound quality. It should be properly adjusted. Refer to the "Preparation – tracking force adjustment".

IMPORTANT

WARNING

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION

TO PREVENT ELECTRICAL SHOCK, DO NOT REMOVE SCREWS, COVER OR CABINET. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

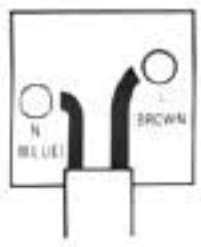
In the United Kingdom (U.K.)

THE MAINS VOLTAGE OF THIS APPARATUS HAS BEEN FIXED TO 240 V~, 50 Hz.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

BLUE: NEUTRAL
BROWN: LIVE



As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows. "The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured blue or black."
"The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured brown or red."

WARNING

This equipment should be disconnected from the mains when not in use.

PREPARATION

Do not connect the power cord to the outlet until all connections are completed.

Unpacking

1. Unpack the turntable package as shown in Fig. 1.
   Do not remove the stylus cover from the stylus until you begin "Tracking force adjustment".
2. Take the platter out of the separate package.
3. Remove the red screws to dismount the counterweight from the body.

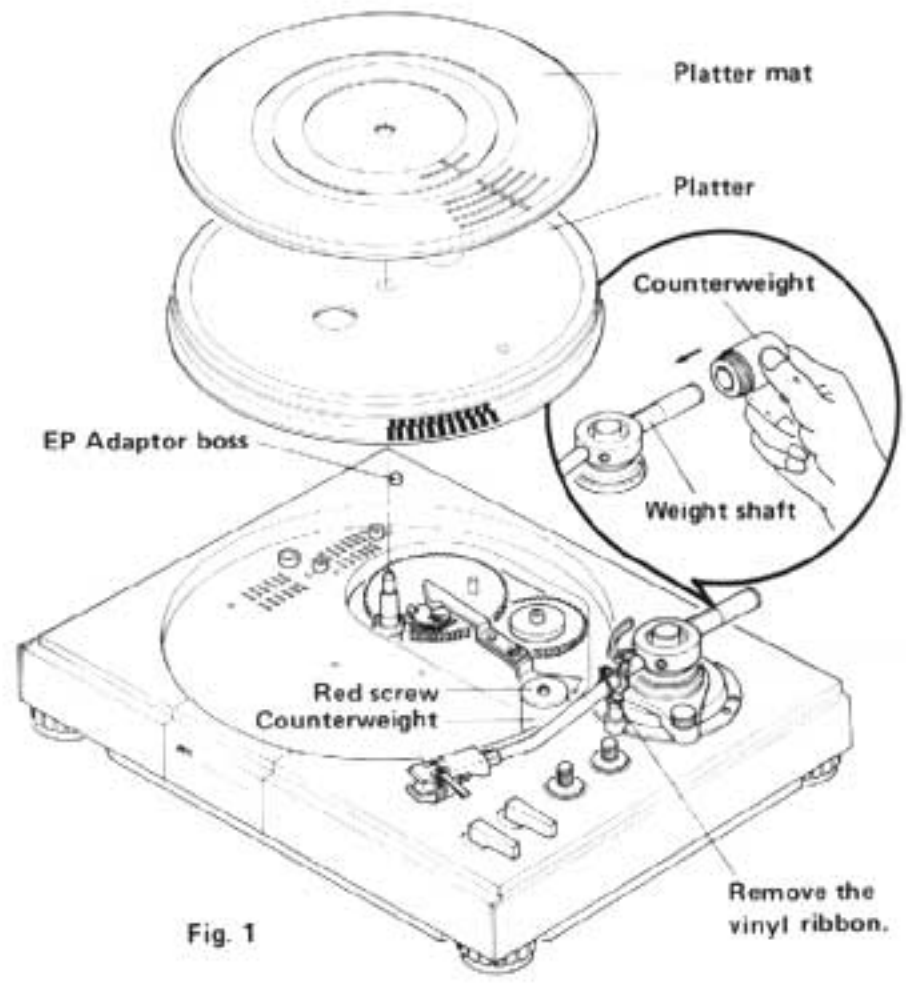


Fig. 1

Setting up

1. Carefully mount the platter on the center spindle of the motor. Do not use excessive force.
   Place the platter mat on the platter.
2. Mount the counterweight on the weight shaft with the tracking force dial end facing toward the tonearm support base, as shown in Fig. 1, then slide the counterweight as close to the tonearm base as possible.
3. Position the EP adaptor on the EP adaptor boss.
4. Cartridge mounting
   Remove the headshell from the tonearm by loosening the connector nut. Connect the four lead wires on the cartridge you have selected. Cartridge lead wires are usually colour-coded as described on page 4. Mount the cartridge on the headshell with the two screws and nuts loosely for easier overhang adjustment. (Refer to "Cartridge mounting" on page 4.)
5. Headshell mounting
   Insert the cartridge-equipped headshell into the connector nut on the end of the tonearm.

Tracking force adjustment

Set the anti-skating knob to "0" on the dial.

↓

Place an unwarped disc on the platter.

↓

Remove the stylus cover from the stylus.

↓

Release the tonearm clamp.

↓

Turn the counterweight until the tonearm is balanced. Stop turning the counterweight when the stylus tip is almost touching the disc surface.

↓

Hold the counterweight at the adjusted position and turn the tracking force dial until the "0" mark is aligned with the index line on the tonearm weight shaft.

↓

Turn the counterweight in the B direction until the "2" mark on the dial is aligned with the index line.

↓

Adjust the anti-skating force according to the cartridge used. Turn the anti-skating knob dial to the same number on the tracking force dial.
Use the • marked dial when employing a round stylus.
Use the ⬬ marked dial for an elliptical stylus.

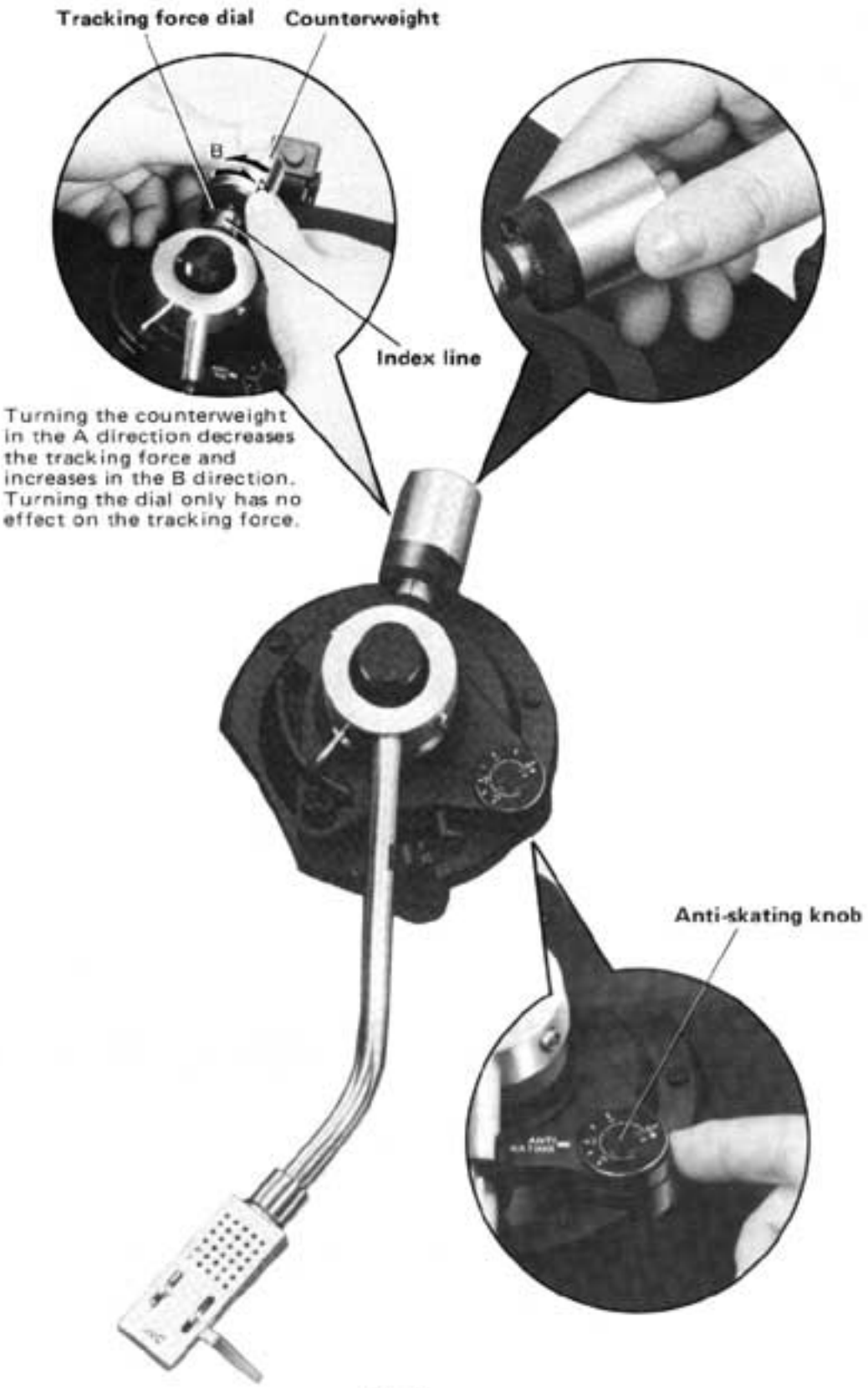

Tracking force dial
Counterweight
B
Index line
Turning the counterweight in the A direction decreases the tracking force and increases in the B direction. Turning the dial only has no effect on the tracking force.
Anti-skating knob

Fig. 2

Overhang adjustment (Stylus tip position adjustment)

Tonearm overhang is the distance between the stylus tip and the center spindle. To make overhang adjustment easier, your JL-A40 has the overhang adjustment point on the motor board. To adjust the overhang, loosen the fixing screws and slide the cartridge until the stylus tip is just over the overhang indicator, then fix the cartridge firmly on the headshell with the screws and nuts. (See Fig. 3)

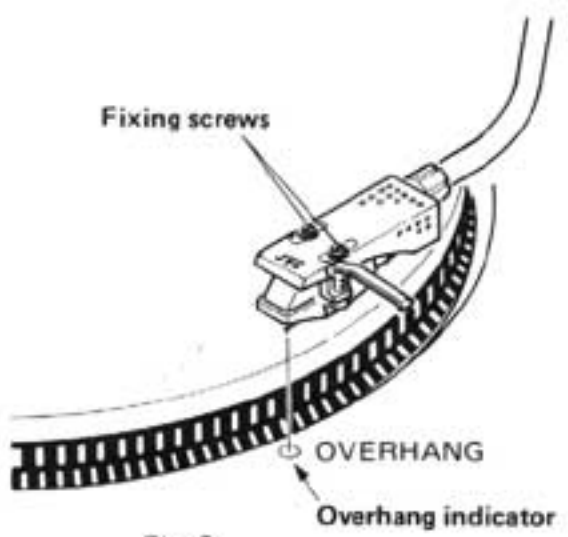


Fig. 3

Tonearm elevator height adjustment

The optimum clearance between the stylus tip and the record surface is about 6 mm when the tonearm is supported by the tonearm elevator (the cueing lever is at the "▼" position). Turning the adjusting screw clockwise as shown in Fig. 4 lowers the height of the tonearm elevator and counter-clockwise increases it.

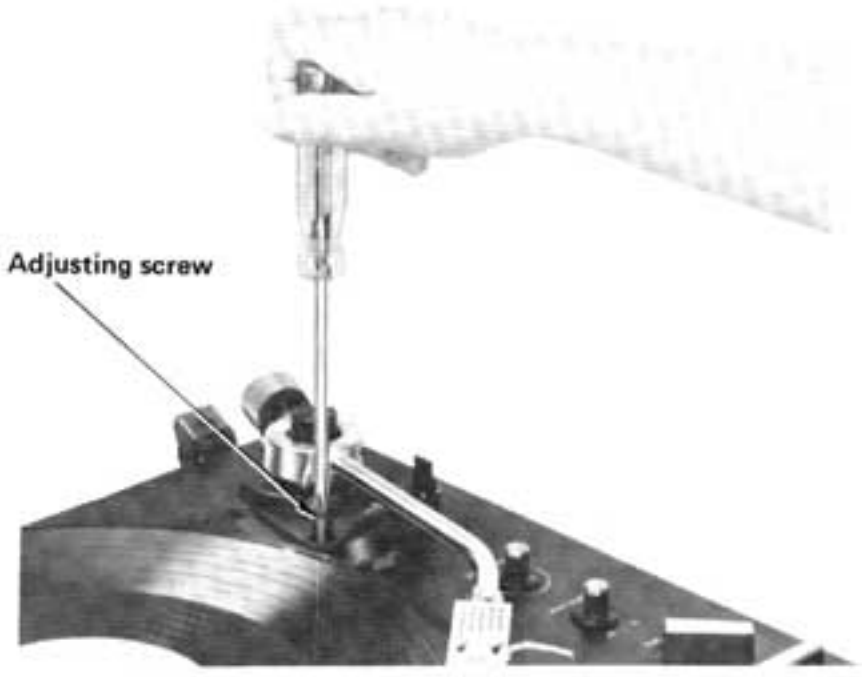


Fig. 4

CONNECTION TO A STEREO AMPLIFIER

Firmly connect the white plug of the JL-A40 output cord to the PHONO L (left) terminal of the stereo amplifier and the red plug to the R (right) terminal as shown in Fig. 6.
Connect the black ground lead to the ground terminal.

Note:
Confirm proper left-to-left and right-to-right channel connections.

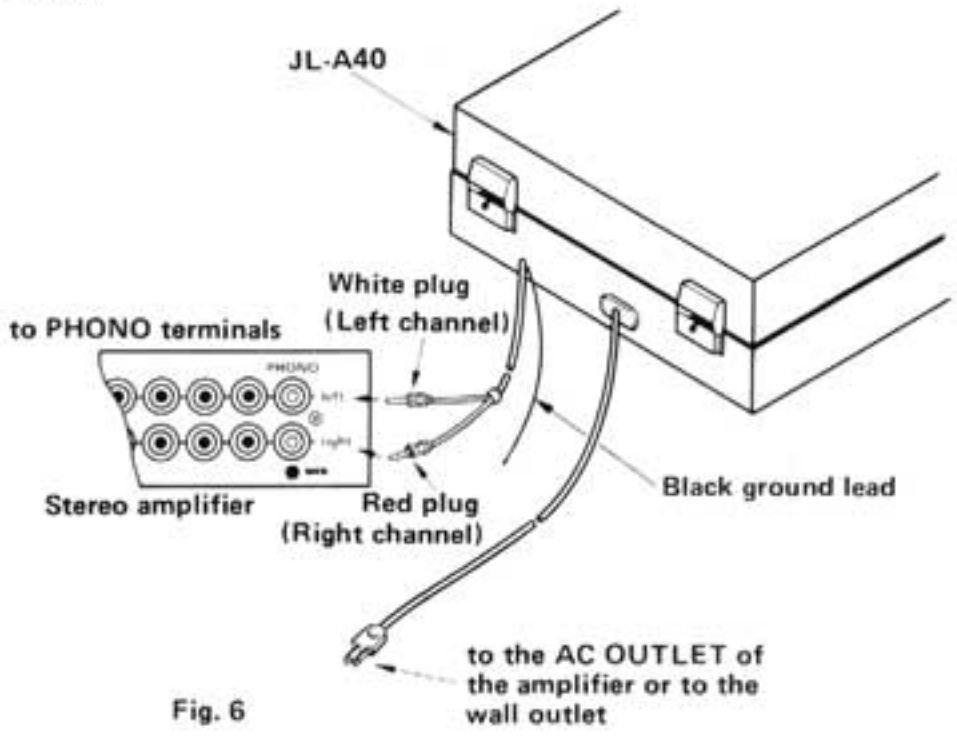


Fig. 6

CARTRIDGE MOUNTING

Stylus angle adjustment

When the headshell is locked into the end of the tonearm, the stylus in some cartridges may still not be tangential (90°) to the platter. If such is the case, loosen the locking screws on the lower side of the tonearm using a small screwdriver (as in Fig. 5) and adjust the stylus at the right angle (90°) to the platter. Measurement by eye is sufficient. Be sure to re-tighten the screws when the adjustment is completed.

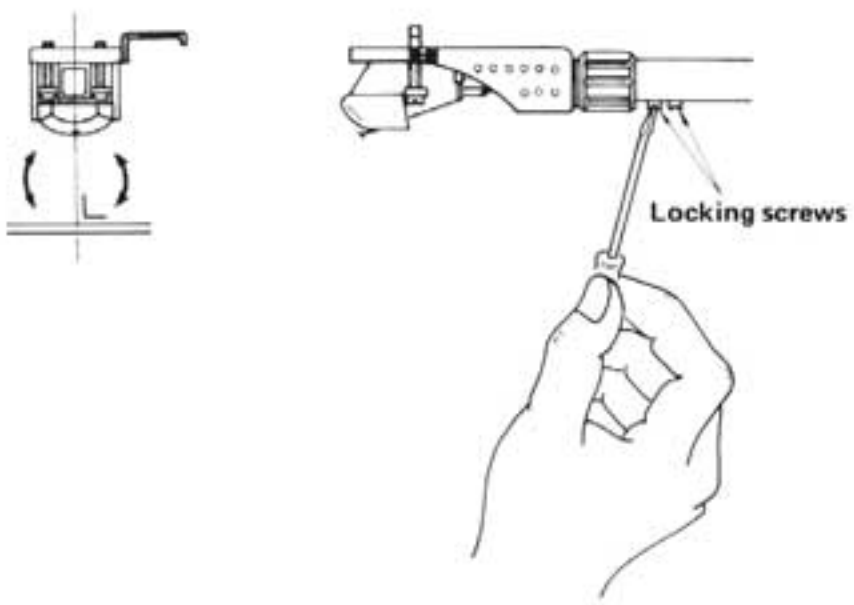


Fig. 5

Connect the lead wire sockets to the appropriate pins of the cartridge, then secure the cartridge to the headshell with the two fixing screws. Leave the fixing screws slightly loose to make the overhang adjustment easier. (The four headshell lead wires are colour-coded as follows.)

Blue (to "LE" or "L−" of the cartridge)
Green (to "RE" or "R−") Red (to "R+" or "R")
White (to "L+" or "L")

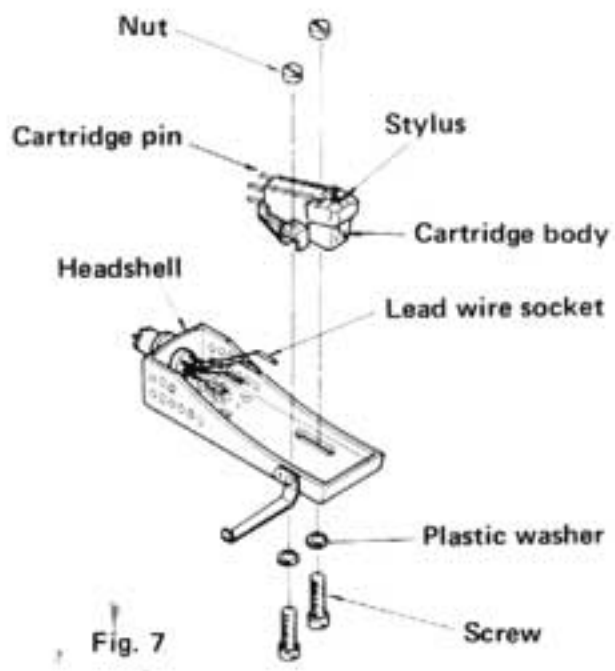
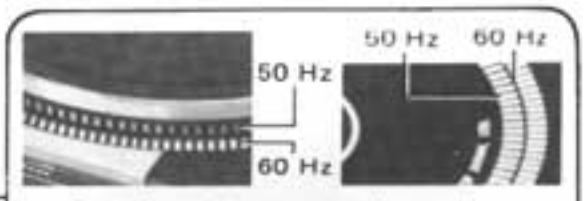


Fig. 7

OPERATION (HOW TO USE)

EP adaptor
Place the adaptor on the center spindle when playing a record having a larger diameter center hole such as a doughnut record.

ANTI SKATING knob
This device cancels out the centripetal force that pulls the tonearm to the center of the platter. This prevents the stylus tip from skating toward the center of the platter and at the same time eliminates any excessive stylus tip force on the inner wall of the record groove.
Use the ● marked dial when employing a round stylus.
Use the ⬬ marked dial when employing an elliptical stylus or a SHIBATA stylus.
Turn the dial to the same number on the tracking force dial.



Strobe pattern and stroboscope
When speed adjustment is performed, observe the strobe around the periphery of the platter for 33-1/3 disc and use the stroboscope provided for 45 speed.
Turn the speed control until the dots appear to be stationary. Be sure to use the dot pattern corresponding to the local line frequency.

- The dots appear to move in the same direction as the platter. . .
  Turntable rpm is too fast.
  Turn the speed control toward S (slow).
- The dots appear to move in the direction opposite to the platter. . .
  Turntable rpm is too slow.
  Turn the speed control toward F (fast).
- The dots appear to be stationary. . .
  Turntable rpm is proper.

Your new JL-A40 is designed to constantly maintain the correct speed once the speed adjustment has been made despite fluctuations in the AC mains voltage and frequency (normally ± 0.4 % on average) which may cause slight changes in the strobe patterns due to lighting of the neon lamp, and speed adjustment is not required.

REJECT lever
Flip the lever toward you (▼) when you wish to stop the record before play is finished. The tonearm will be automatically lifted and returned to the clamp.

Tonearm cueing lever (LIFT)
Flip the lever toward you (▼) when you wish to gently lift tonearm.
Flip the lever back when you wish to gently lower tonearm.

SPEED SELECT knob
33-1/3 rpm record . . . . Turn the knob to align the index line on the knob with "33".
45 rpm record . . . . . Turn the knob to align the index line on the knob with "45".

SPEED CONTROL knob
Speed adjustment is performed with the LIFT lever flipped toward you (▼) while operating the turntable without a disc placed on the platter. Turn the knob until the dots (around the periphery of the platter for 33-1/3 disc and on the stroboscope provided for 45 disc) appear to be stationary. Refer to "Strobe pattern and stroboscope".

Fig. 8

STYLUS REPLACEMENT

Replacement of the stylus can normally be made easily as in Fig. 10 by taking off the worn stylus from the cartridge body and replacing it with a new stylus.

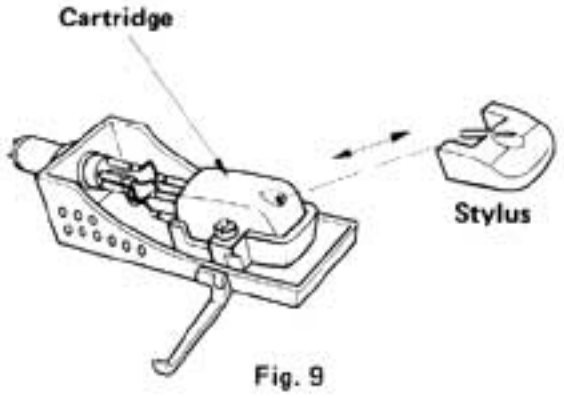


Fig. 9

TROUBLESHOOTING

What seems to be trouble is not always real trouble. Make sure first.

No sound at all . . .

1) Are the cables connected properly?
   (Cables should be connected firmly and properly.)
2) Is the amplifier tape monitor switch turned on?
   (The tape monitor switch should be turned off.)
3) Is the amplifier speaker select knob set to the "SPEAKER OFF" position?
   (The speaker select knob should be set to 1 or 2.)
4) Is the source select knob set to sources other than "PHONO"?
   (The source select knob should be set to "PHONO" position.)
5) Is the amplifier volume control set to "MIN"?
   (The volume knob should be turned clockwise to the desired level.)
6) Is the tonearm connector nut loose?
   (The connector nut should be tightened firmly.)
7) Are cartridge wires coming off or loosely connected?
   (The cartridge wires should be firmly connected.)

Noise when playing record . . .

1) Is the record worn?
   (Replace with a new one.)
2) Is the stylus tip worn?
   (Replace with a new one.)
3) Is dust on the stylus tip?
   (Clean with a stylus cleaner.)
4) Is the record dusty?
   (Clean the record grooves with a record cleaner.)
5) Is there low and loud hum?
   (Change the power cord path or reverse the AC plug.)
   (Check that the ground lead is properly connected.)

The platter does not turn . . .

1) Is the power cord connected to the AC outlet?

The stylus is tripping or skating . . .

1) Is the tracking force too light?
   (Adjust the tracking force.)
2) Is the anti-skating knob set properly?
   (Refer to "Operation" on page 5.)
3) Is the record badly warped?
   (Replace with an unwarped one.)
4) Is the turntable installed in a place subject to vibration?
   (Select a vibration-free place for installation.)

Loud howling . . .

1) Is the turntable too near the speakers?
   (Position at least 40 cm from the speaker.)
2) Is the turntable located on the speaker box?
   (Move to a place as far from the speakers as possible.)
3) Is the volume or bass tone control emphasized to distort the sound?
   (Decrease the volume or bass tone control to a level providing undistorted sound.)

SPECIFICATOINS

TURNTABLE

Type	: Auto-return, direct-drive turntable
Drive Motor	: DC Servomotor
Speeds	: 33-1/3 and 45 rpm
Wow and Flutter	: Less than 0.03 % (WRMS) 0.05 % (DIN)
Signal to Noise Ratio	: More than 60 dB (IEC-B) 70 dB (DIN-B)
Speed Adjustment Range	: More than ± 2.5 %
Platter	: 31 cm (12") Die-cast aluminum alloy

CARTRIDGE (Except the JL-A40 for U.S.A., Canada and U.K.)

Type	: Moving magnet (MD-1025)
Stylus	: 0.5 mil. diamond for DT-Z1S
Optimum Tracking Force	: 1.5 to 2.0 grams (DT-Z1S)
Output	: 3 mV (1 kHz)
Frequency Response	: 10 to 25,000 Hz (DT-Z1S)
Separation	: Better than 25 dB (1 kHz)
Load Impedance	: 47 kΩ to 100 kΩ
Compliance	: 25×10^{-6} cm/dyne (Static) 10×10^{-6} cm/dyne (Dynamic)

TONEARM

Type	: Statically-balanced S-shaped tubular arm with JVC developed TH (Tracing Hold) balancing system and tracking force dial in 0.1 gram steps.
Effective Arm Length	: 220 mm
Overhang	: 15 mm
Applicable Tracking Force Range	: 0 to 3 grams
Applicable Cartridge Weight	: 14.5 to 21.5 grams (including headshell)
Tracking Error	: +3°35', -0°43'

GENERAL

Dimensions	: 46.0(W) x 36.8(D) x 14.4(H) cm (18-1/8" x 14-1/2" x 5-11/16")
Weight	: 7.2 kg (15.84 lbs.)
Power Supply	: See table on the back cover
Power Consumption	: See table on the back cover

JVC

VICTOR COMPANY OF JAPAN, LIMITED

Power specifications

Countries	Line Voltage & Frequency	Power Consumption
U.S.A., CANADA	AC 120 V ∿, 60 Hz	4.5 watts
CONTINENTAL EUROPE	AC 220 V ∿, 50 Hz	4.5 watts
U.K., AUSTRALIA	AC 240 V ∿, 50 Hz	4.5 watts
U.S. MILITARY MARKET	AC 100/120/220/240 V ∿ Selectable, 50/60 Hz	3.5 watts
OTHER AREAS	AC 100/120/220/240 V ∿ Selectable, 50/60 Hz	3.5 watts

Printed in Japan
E30580-616A